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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/722,194

Applicant(s)

ADAMCZYK ET AL.

Examiner

Syed Bokhari

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-25, 28, 30-31, 33-47 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 26, 27, 29 and 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 02/06/2007
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 1, 4-5, 8-9, 12, 15-16, 23, 28, 30-31, 34, 38, 41 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kametani (US 2002/0003803 A1 in view of Nassar US 2004/0004968 A1).

Claims 1, 4-5 and 8-9:

For claim 1, Kametani discloses a method of operating a data network between a routing gateway for a subscriber and a data service provider providing a data service, the method comprising (see paragraph 0056 lines 1-2, paragraph 0057 lines 1-6 and paragraph 0058 lines 1-19 on page 4 in Description of the Preferred Embodiments); receiving from the data service provider an identification of the routing gateway, an identification of the data service provider (see paragraph 0071 lines 17-22 on page 5 in Description of the Preferred Embodiments); data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider (see paragraph 0069 lines 4-11 on page 4 in Description of the Preferred Embodiments) and responsive to receiving the identification of the routing gateway, the identification of the data

service provider, and the data flow characteristics for the data service, saving the data flow characteristics of the data service for the routing gateway at the data network (see paragraph 0071 lines 1-22 and paragraph 0072 lines 1-9).

For claim 5, Kametani discloses wherein saving the data flow characteristics at the data network comprises creating an application flow control record for the routing gateway (see paragraph 0035 lines 1-2 and paragraph 0036 lines 1-8 on page 3 in Summary of Invention).

For claim 8, Kametani discloses, wherein receiving is preceded by: receiving a request from the routing gateway for a session using the data service provided by the data service provider (see paragraph 0039 lines 18-24 on page 3 in Summary of the Invention) and forwarding the request from the routing gateway to the data service provider (see paragraph 0042 lines 1-10 on page 3 in Summary of the Invention).

For claim 9, Kametani discloses, providing an interconnection between the routing gateway and the data service provider in accordance with the data flow characteristics to thereby support a session of the routing gateway using the data service provided by the data service provider (see paragraph 0045 lines 1-14 on page 3 in Summary of the Invention).

Claim 12 and 15-16:

For claim 12, Kametani discloses a method of operating a data service provider providing a data service over a data network to a routing gateway for a subscriber using the data service, the method comprising (see paragraph 0056 lines 1-2, paragraph 0057 lines 1-6 and paragraph 0058 lines 1-19 on page 4 in Description of the Preferred Embodiments); transmitting to the data network an identification of the routing gateway, an identification of the data service provider (see paragraph 0074 lines 1-23 on page 5 in Description of the Preferred Embodiments); data flow characteristics of the data service for a session with the routing gateway using the data service (see paragraph 0072 lines 1-14 on page 5 in Description of the Preferred Embodiments) and providing the data service over the data network and routing gateway in accordance with the data flow characteristics transmitted to the data network to support a data session of the data service provider with the routing gateway (see paragraph 0075 lines 1-8 on page 5 in Description of the Preferred Embodiments).

Claim 15, Kametani discloses wherein transmitting to the data network further includes transmitting an authorization code for the data service, the method further comprising (gateway (see paragraph 0076 lines 1-5 on page 5 in Description of the Preferred Embodiments) and before providing the data service, receiving a validation of the authorization code from the data network (see

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paragraph 0071 lines 8-16 on page 5 in Description of the Preferred Embodiments).

For claim 16, Kametani discloses wherein transmitting is preceded by: receiving a request from the routing gateway for a session using the data service (see paragraph 0039 lines 18-24 on page 3 in Summary of the Invention).

Claims 23, 28 and 30-31:

For claim 23, Kametani discloses a data network providing a data connection between a routing gateway for a subscriber and a data service provider providing a data service, the data network comprising (see paragraph 0056 lines 1-2, paragraph 0057 lines 1-6 and paragraph 0058 lines 1-19 on page 4 in Description of the Preferred Embodiments); first transceiver configured to receive from the data service provider an identification of the routing gateway, an identification of the data service provider (see paragraph 0071 lines 17-22 on page 5 in Description of the Preferred Embodiments); data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider (see paragraph 0069 lines 4-11 on page 4 in Description of the Preferred Embodiments) and a memory configured to save the data flow characteristics of the data service for the routing gateway at the data network responsive to receiving the identification of the routing gateway, the

identification of the data service provider, and the data flow characteristics for the data service (see paragraph 0071 lines 1-22 and paragraph 0072 lines 1-9).

For claim 28, Kametani discloses, wherein the memory is further configured to save the data flow characteristics at first and second databases within the data network (see paragraph 0035 lines 1-2 and paragraph 0036 lines 1-8 on page 3 in Summary of Invention).

For claim 30, Kametani discloses wherein the second transceiver is further configured to receive a request from the routing gateway for a session using the data service provided by the data service provider (see paragraph 0039 lines 18-24 on page 3 in Summary of the Invention); wherein the first transceiver is still further configured to receive the identification of the routing gateway, the identification of the data service provider (see paragraph 0071 lines 17-22 on page 5 in Description of the Preferred Embodiments) and the data flow characteristics of the data service for a session of the routing gateway after forwarding the request from the routing gateway (see paragraph 0071 lines 1-22 and paragraph 0072 lines 1-9).

For claim 31, Kametani discloses wherein the first and second transceivers are further configured to provide an interconnection between the routing gateway and the data service provider in accordance with the data flow characteristics to

thereby support a session of the routing gateway using the data service provided by the data service provider (see paragraph 0045 lines 1-14 on page 3 in Summary of the Invention).

Claims 34 and 37-38:

For claim 34, Kametani discloses a data service provider providing a data service over a data network to a routing gateway for a subscriber using the data service, the data service provider comprising (see paragraph 0022 lines 1-7 on page 2 in Summary of the Invention); transceiver configured to transmit to the data network an identification of the routing gateway, an identification of the data service provider (see paragraph 0074 lines 1-23 on page 5 in Description of the Preferred Embodiments); data flow characteristics of the data service for a session with the routing gateway using the data service and configured to provide the data service over the data network (see paragraph 0072 line 1-14 on page 5 in Description of the Preferred Embodiments) and routing gateway in accordance with the data flow characteristics transmitted to the data network to support a data session of the data service provider with the routing gateway (see paragraph 0075 lines 1-8 on page 5 in Description of the Preferred Embodiments).

For claim 37, Kametani discloses wherein the transceiver is further configured to transmit an authorization code for the data service to the data network (see paragraph 0076 lines 1-5 on page 5 in Description of the Preferred

Embodiments) and still further configured to receive a validation of the authorization code from the data network before providing the data service (see paragraph 0071 lines 8-16 on page 5 in Description of the Preferred Embodiments).

For claim 38, Kametani discloses wherein the transceiver is further configured to receive a request from the routing gateway for a session using the data service (see paragraph 0065 lines 1-8 on page 4 in Description of the Preferred Embodiments) and the transmitter is further configured to transmit the identification of the routing gateway, the identification of the data service provider, and the data flow characteristics of the data service responsive to receiving the request from the routing gateway (see paragraph 0073 lines 1-3 and paragraph 0074 lines 1-5 on page 5 in Description of the Preferred Embodiments).

Claims 41 and 44:

For claim 41, Kametani discloses a routing gateway providing subscriber use of a data service provided by a data service provider over a data network, the routing gateway comprising (see paragraph 0059 lines 1-11 on page 4 in Description of the Preferred Embodiments); a transceiver configured to receive data flow characteristics of the data service for a session of the routing gateway

using the data service provided by the data service provider (see paragraph 0068 lines 1-6 on page 4 in Description of the Preferred Embodiments).

For claim 44, Kametani discloses configured to provide access to the data service over the data network in accordance with the data flow characteristics received from the data network to support a data session with the data service provider (see paragraph 0042 lines 1-10 on page 3 in Summary of the Invention).

Kametani discloses all the subject matter of the claimed invention with the exception of:

- Forwarding the data flow characteristics of the data service to the routing as recited in claim 1.
- Wherein receiving further includes receiving an authorization code for the data service, the method further comprising as recited in claim 4.
- Before saving the data flow characteristics, validating the authorization code as recited in claim 4.
- Configured to provide access to the data service over the data network in accordance with the data flow characteristics received from the data network to support a data session with the data service provider as recited in claim 41.

Nassar from the same or similar filed of endeavor teaches:

For claim 1, forwarding the data flow characteristics of the data service to the routing (see paragraph 0044 lines 13-21 on page 4 in Detailed Description of the Exemplary Embodiments).

For claim 4, wherein receiving further includes receiving an authorization code for the data service, the method further comprising (see paragraph 0030 lines 11-17 on page 2 in Detailed Description of the Exemplary Embodiments) and before saving the data flow characteristics, validating the authorization code (see paragraph 0030 lines 17-18 on page 2 and lines 19-20 on page 3 in Detailed Description of the Exemplary Embodiments).

For claim 41, configured to provide access to the data service over the data network in accordance with the data flow characteristics received from the data network to support a data session with the data service provider (see paragraph 0029 lines 1-17 on page 2 in Detailed Description of the Exemplary Embodiments).

It would have been obvious to one of ordinary skill in the art at the time of invention was made to use the same method of forwarding of data flow characteristics, authentication for service and validation before saving it as taught by Nassar in communication network of Kametani. The forwarding of data flow characteristics and saving it after the user authentication and validation of user

access as taught by Nassar can be modified/implemented in the communication network of Kametani by creating the authentication and validation policy on one of group servers before saving of the data flow characteristics and then forwarding the same to the access gateway. The authentication and validation of the user access to the data network before saving and then forwarding of data flow characteristics is the requirement of the service provider to provide the service as per agreement. The motivation for implementing the authentication and validation policy and the procedure to one of the group servers is to provide the access to the users to the data network for secured and efficient service with the data service provider.

6. Claim 19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oishi et al. (US 2003/0237002 A1) in view of Kametani (US 2002/0003803 A1).

For claim 19, Oishi et al. discloses, a method of operating a routing gateway providing subscriber use of a data service provided by a data service provider over a data network, the method comprising (see paragraph 0053 lines 1-12 on page 3 in Detailed Description of the Preferred Embodiments) and providing access to the data service over the data network in accordance with the data flow characteristics received from the data network to support a data session with the data service provider (see paragraph 0063 lines and paragraph 0065 lines 1-6 on page 4 in Detailed Description of the Preferred Embodiments).

For claim 22, Oishi et al. discloses wherein receiving is preceded by: transmitting a request to the data service provider for a session using the data service provided by the data service provider (see paragraph 0079 lines 1-7 and paragraph 0080 lines 1-4 on page 5 in Detailed Description of the Preferred Embodiments).

Oishi et al. discloses all the subject matter of the claimed invention with the exception of receiving data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider. Kametani in the same or similar field of endeavor teaches receiving data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider (see paragraph 0069 lines 4-11 on page 4 in Description of the Preferred Embodiments).

It would have been obvious to one of ordinary skill in the art at the time of invention was made to method as taught by Kametani in the communication network Oishi et al. The data flow characteristics of the data service sending to the routing gateway as taught by Kametani can be modified/implemented in the communication network of Oishi et al. by enhancing the programming of SP access control server. The data flow characteristics as per request of user is mapped in the bank server for providing the requested service. The motivation for implementing the same method of mapping the data flow characteristics in the SP access control server is to make the network more efficient as it would be done at the data service network before the relay gateway.

7. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Trethewey (US 2003/0056002 A1) in view of Menditto et al. (USP 6,981,029).

For claim 45, Trethewey discloses a computer program product configured to operate a data network between a routing gateway for a subscriber and a data service provider providing a data service (see paragraph 0016 lines 1-7 on page 2 in Detailed Description); the computer program product comprising a computer useable storage medium having computer-readable program code embodied in the medium, the computer-readable program code comprising (see paragraph 0017 lines 5-8 on page 2 in Detailed Description); -readable program code that is configured to receive from the data service provider an identification of the routing gateway, an identification of the data service provider (see paragraph 0023 lines 8-14 and paragraph 0024 lines 1-5 on page 2 in Detailed Description); data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider (see paragraph 0027 lines 4-9 on page 3 in Detailed Description) and computer-readable program code that is configured to forward the data flow characteristics of the data service to the routing gateway (see paragraph 0025 lines 1-12 on page 2 in Detailed Description).

Trethewey discloses all the subject matter of the claimed invention with the exception of computer-readable program code that is configured to save the data

flow characteristics of the data service for the routing gateway at the data network responsive to receiving the identification of the routing gateway, the identification of the data service provider, and the data flow characteristics for the data service. Menditto et al. in the same or similar field of endeavor teaches computer-readable program code that is configured to save the data flow characteristics of the data service for the routing gateway at the data network responsive to receiving the identification of the routing gateway, the identification of the data service provider, and the data flow characteristics for the data service (see column 11 lines 37-52 in Detailed Description of the Invention).

It would have been obvious to one of ordinary skill in the art at the time of invention was made to use the content gateway as taught by Menditto et al. in the communication network of Trethewey. The content gateway provides the routing and processing function based on user request as taught by Menditto et al. can be modified/implemented in the communication network of Trethewey by replacing the load balancing and NAT gateways at application service provider. The content gateway receives the user request and provides routing and processing function and also determines the source information. The motivation for introducing the content gateway in place of load balancer and NAT gateways is to make this network more efficient and economical cost wise.

8. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Menditto et al. (USP 6,981,029) in view of Trethewey (US 2003/0056002 A1).

For claim 46, Menditto et al. discloses a computer program product configured to operating a data service provider providing a data service over a data network to a routing gateway for a subscriber using the data service (see Abstract lines 1-4); the computer-readable program code comprising: computer-readable program code that is configured to transmit to the data network an identification of the routing gateway, an identification of the data service provider (see column 2 lines 45-53 in Summary of the Invention); data flow characteristics of the data service for a session with the routing gateway using the data service (see column 3 lines 11-21 in Detailed Description of the Invention) and computer-readable program code that is configured to provide the data service over the data network and routing gateway in accordance with the data flow characteristics transmitted to the data network to support a data session of the data service provider with the routing gateway (see column 2 lines 35-52 in Detailed Description of the Invention).

Menditto discloses all the subject matter of the claimed invention with the exception of the computer program product comprising a computer useable storage medium having computer-readable program code embodied in the medium. Trethewey et al. in the same or similar field of endeavor teaches the computer program product comprising a computer useable storage medium having computer-readable program code embodied in the medium (see paragraph.0019 lines 1-9 on page 2 in Detailed Description).

It would have been obvious to one of ordinary skill in the art at the time of invention was made to enhance the functionalities of the content gateway to do the load balancing at the same time as taught by Trethewey in the communication network of Menditto et al. The content gateway comprising of storage to store instruction and processor to execute as taught by Trethewey can be modified/implemented in the communication network of Menditto et al. by using a load balancer in place of content gateway. The load-balancing program installed on a load balancer as taught by Trethewey can be modified/implemented in the communication network of Menditto et al. by enhancing the content gateway processor to balance the load along with the routing and processing of multiple user requests. The content gateway receives the user request and provides routing and processing function and also determines the source information. The motivation of enhancing the function of the content gateway is to improve the efficiency and capacity of the network in an economical way.

9. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nassar (US 2003/0056002 A1) in view of Menditto et al. (USP 6,981,029 B1).

For claim 47, Nassar discloses a computer program product configured to operate a routing gateway providing subscriber use of a data service provided by a data service provider over a data network (see paragraph 0009 lines 7-14 on page 1 in Summary of the Invention); the computer program product comprising

a computer useable storage medium having computer-readable program code embodied in the medium (see paragraph 0029 lines 1-17 on page 2 in Detailed Description of the Exemplary Embodiments) and computer-readable program-code that is configured to provide access to the data service over the data network in accordance with the data flow characteristics received from the data network to support a data session with the data service provider (see paragraph 0042 lines 1-16 on page 4 in Detailed Description of the Exemplary Embodiments). Nassar discloses all the subject matter of the claimed invention with the exception of the computer-readable program code comprising: computer-readable program code that is configured to receive data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider. Menditto et al. in the same or similar filed of endeavor discloses the computer-readable program code comprising: computer-readable program code that is configured to receive data flow characteristics of the data service for a session of the routing gateway using the data service provided by the data service provider (see column 2 lines 35-52 in Detailed Description of the Invention).

It would have been obvious to one of ordinary skill in the art at the time of invention was made to use the content gateway function as taught by Menditto et al. in the communication network of Nassar. The content gateway provides the routing and processing function based on user request as taught by Menditto et al. can be modified/implemented in the communication network of Nassar by

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enhancing the router to process requests from a user to the service provider and maintain the service session. The content gateway includes a router for receiving and processing the request from the user terminal via data service network to data service provider for the service session. The motivation for enhancing the functionality of the router is to use it as a content gateway for better and efficient performance.

10. Claim 2-3, 10-11, 13, 17-18, 24, 33, 35, 39-40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kametani (US 2002/0003803 A1) in view of Nassar US 2004/0004968 A1) and further in view of Jeong et al. (USP 6,795,443 B1).

Kametani and Nassar disclose all limitations of the claims as described in paragraph 5 of this office action but fail to teach:

- Wherein the routing gateway is coupled to the data network via a digital subscriber line as recited in claim 2.
- Wherein the identification of the routing gateway comprises a digital subscriber line identification as recited in claim 2.
- Wherein the data flow characteristics of the data service include a bandwidth characterization for the data service as recited in claim 3.
- A priority characterization for the data service as recited in claim 3.
- Deleting the data flow characteristics saved at the data network for the session of the routing gateway using the data service provided by the data service provider as recited in claim 10.

- Terminating the interconnection between the routing gateway and the data service provider to thereby terminate the session of the routing gateway using the data service provided by the data service provider as recited in claim 10.
- Before deleting the data flow characteristics, receiving a request from the data service provider to delete the data flow characteristics for the session of the routing gateway using the data service, wherein the data flow characteristics are deleted responsive to receiving the request as recited in claim 11.
- Wherein the routing gateway is coupled to the data network via a digital subscriber line as recited in claim 13.
- Wherein the identification of the routing gateway comprises a digital subscriber line identification as recited in claim 13.
- Transmitting a request to the data service provider to delete the data flow characteristics for the session of the routing gateway using the data service as recited in claim 17.
- Transmitting a request to the data service provider to delete the data flow characteristics for the session of the routing gateway using the data service
- Further comprising: after transmitting the request to delete the data flow characteristics as recited in claim 18.
- Terminating the data service over the data network and routing gateway as recited in claim 18.

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- Wherein the routing gateway is coupled to the data network via a digital subscriber line as recited in claim 20.
- Wherein the routing gateway is coupled to the data network via a digital subscriber line as recited in claim 24.
- Wherein the identification of the routing gateway comprises a digital subscriber line identification as recited in claim 24.
- Wherein the memory is further configured to delete the data flow characteristics saved at the data network for the session of the routing gateway using the data service provided by the data service provider as recited in claim 32.
- Wherein the first transceiver is further configured to receive a request from the data service provider to delete the data flow characteristics for the session of the routing gateway using the data service as recited in claim 33.
- Wherein the memory is further configured to delete the data flow characteristics responsive to receiving the request to delete the data flow characteristics as recited in claim 33.
- Wherein the first and second transceivers are further configured to terminate the interconnection between the routing gateway and the data service provider to thereby terminate the session of the routing gateway using the data service provided by the data service provider as recited in claim 32.
- Wherein the routing gateway is coupled to the data network via a digital subscriber line as recited in claim 35.

- Wherein the identification of the routing gateway comprises a digital subscriber line identification as recited in claim 35.
- Wherein the transceiver is further configured to transmit a request to the data network to delete the data flow characteristics for the session of the routing gateway using the data service as recited in claim 39.
- Wherein the transceiver is further configured to terminate the data service over the data network as recited in claim 40.
- And routing gateway after transmitting the request to delete the data flow characteristics as recited in claim 40.
- Wherein the transceiver is coupled to the data network via a digital subscriber line as recited in claim 42.

Jeong et al. in the same or similar field of endeavor teaches:

For claim 2, wherein the routing gateway is coupled to the data network via a digital subscriber line (see column 4 lines 36-40 in Detailed Description of Preferred Embodiments) and wherein the identification of the routing gateway comprises a digital subscriber line identification (see column 8 lines 63-67 in Detailed Description of Preferred Embodiments).

For claim 3, Menditto discloses wherein the data flow characteristics of the data service include a bandwidth characterization for the data service (see column 14 lines 42-48 in Detailed Description of the Invention) and a priority

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characterization for the data service (column 4 lines 57-64 in Detailed Description of the Invention).

For claim 10, deleting the data flow characteristics saved at the data network for the session of the routing gateway using the data service provided by the data service provider (examiner officially noted as it is well known in the art that the data flow characteristics is deleted after transmitting the data) and terminating the interconnection between the routing gateway and the data service provider to thereby terminate the session of the routing gateway using the data service provided by the data service provider (see column 5 lines 37-45 in Detailed Description of Preferred Embodiments).

For claim 11, before deleting the data flow characteristics, receiving a request from the data service provider to delete the data flow characteristics for the session of the routing gateway using the data service, wherein the data flow characteristics are deleted responsive to receiving the request, examiner officially noted as it is well known in the art that data service provider sends the request to data service network to delete the data flow characteristics and the same are deleted after the session is completed.

For claim 13, wherein the routing gateway is coupled to the data network via a digital subscriber line (see column 4 lines 36-40 in Detailed Description of

Preferred Embodiments) and wherein the identification of the routing gateway comprises a digital subscriber line identification (see column 8 lines 63-67 in Detailed Description of Preferred Embodiments).

For claim 17, transmitting a request to the data service provider to delete the data flow characteristics for the session of the routing gateway using the data service examiner officially noted as it is well known in the art that routing gateway sends the request to data service provider to delete the data flow characteristics and the same are deleted after the session is completed.

For claim 18, further comprising: after transmitting the request to delete the data flow characteristics (examiner officially noted as it is well known in the art that the data flow characteristics is deleted after transmitting the data); terminating the data service over the data network and routing gateway (see column 5 lines 37-45 in Detailed Description of Preferred Embodiments).

For claim 24, wherein the routing gateway is coupled to the data network via a digital subscriber line (see column 4 lines 36-40 in Detailed Description of Preferred Embodiments).

For claim 33, wherein the memory is further configured to delete the data flow characteristics responsive to receiving the request to delete the data flow

characteristics examiner officially noted, as it is well known in the art that the data is deleted from the memory when the request is received after the session is completed.

For claim 35, wherein the routing gateway is coupled to the data network via a digital subscriber line (see column 4 lines 36-40 in Detailed Description of Preferred Embodiments) and wherein the identification of the routing gateway comprises a digital subscriber line identification (see column 8 lines 63-67 in Detailed Description of Preferred Embodiments).

For claim 39, wherein the transceiver is further configured to transmit a request to the data network to delete the data flow characteristics for the session of the routing gateway using the data service, examiner officially noted as it is well known in the art that routing gateway sends the request to data service provider to delete the data flow characteristics and the same are deleted after the session is completed.

For claim 40, wherein the transceiver is further configured to terminate the data service over the data network (see column 5 lines 37-45 in Detailed Description of Preferred Embodiments) and routing gateway after transmitting the request to delete the data flow characteristics (examiner officially noted as it is well known in the art that the data flow characteristics is deleted after transmitting the data).

For claim 42, wherein the transceiver is coupled to the data network via a digital subscriber (see column 4 lines 36-40 in Detailed Description of Preferred Embodiments).

It would have been obvious to one of ordinary skill in the art at the time of invention was made to use the same method of DSL as taught by Jeong et al. in the communication network of Kametani. The Digital Subscriber Lines (DSL) function as taught by Jeong et al. can be modified/implemented in the communication network by replacing the access gateway with the DSL as it works as a routing gateway and also terminates the session. It is common for the customer equipment to be integrated for higher level functionality such as routing or other applications by using DSL as a router or gateway. The motivation for using DSL as a routing gateway is to make the network cost effective.

11. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oishi et al. (US 2003/0237002 A1) in view of Kametani (US 2002/0003803 A1) and further in view of Menditto et al. (USP 6,981,029).

For claim 21, Oishi et al. and Kametani disclose all the limitations of the claimed invention as described in paragraph 6 in this office action but they fail to teach wherein the data flow characteristics of the data service include a bandwidth

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characterization for the data service and a priority characterization for the data service. Menditto et al. from the same or similar filed of endeavor discloses wherein the data flow characteristics of the data service include a bandwidth characterization for the data service (see column 14 lines 42-48 in Detailed Description of the Invention) and a priority characterization for the data service (column 4 lines 57-64 in Detailed Description of the Invention).

It would have been obvious to one of ordinary skill in the art at the time of invention was made to method as taught by Menditto et al. in the communication network of Oishi et al. The bandwidth and priority characterization of the data as taught by Menditto can be modified/implemented in the communication network of Oishi et al. by enhancing the program of access gateway router. The bandwidth and priority characterization of the data information is essential for the data service network to maintain the quality of service of the link for the service provider. The motivation for implementing the same method of bandwidth and priority characterization of the data information from the access gateway router is to improve the quality of service of the link with cost effective way.

12. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oishi et al. (US 2003/0237002 A1) in view of Kametani (US 2002/0003803 A1) and further in view of Jeong et al. (USP 6,795,443 B1).

For claim 20, Oishi et al. and Kametani disclose all the limitations of the claimed invention as described in paragraph 6 but fail to teach wherein the routing

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gateway is coupled to the data network via a digital subscriber line. Jeong et al. in the same or similar field of endeavor discloses wherein the routing gateway is coupled to the data network via a digital subscriber line (see column 4 lines 36-40 in Detailed Description of Preferred Embodiments).

It would have been obvious to one of ordinary skill in the art at the time of invention was made to method as taught by Deong et al. in the communication network of Oishi et al. The routing gateway coupled to the data network via a digital subscriber line as taught by Deong et al. can be modified/implemented in the communication network of Oishi et al. by using a DSL for CPE. It is common for the customer equipment to be integrated for higher level functionality such as routing or other applications by using DSL as a router or gateway. The motivation for using DSL for CPE is to make the network cost effective.

13. Claim 14, 25, 36 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kametani (US 2002/0003803 A1) in view of Nassar US 2004/0004968 A1) and further in view of Menditto et al. (USP 6,981,029 B1).

For claim 14, Kametani and Nassar disclose all limitations of the claim as described in paragraph 5 of this office action but fail to teach:

- Wherein the data flow characteristics of the data service include a bandwidth characterization for the data service as recited in claim 14.
- And a priority characterization for the data service as recited in claim 14.

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- Wherein the data flow characteristics of the data service include a bandwidth characterization for the data service as recited in claim 25.
- And a priority characterization for the data service as recited in claim 25.
- Wherein the data flow characteristics of the data service include a bandwidth characterization for the data service as recited in claim 36.
- And a priority characterization for the data service as recited in claim 36.

Menditto from the same or similar field of endeavor discloses:

For claim 14, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service (see column 14 lines 42-48 in Detailed Description of the Invention) and a priority characterization for the data service (column 4 lines 57-64 in Detailed Description of the Invention).

For claim 25, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service (see column 14 lines 42-48 in Detailed Description of the Invention) and a priority characterization for the data service (column 4 lines 57-64 in Detailed Description of the Invention).

For claim 36, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service (see column 14 lines 42-48 in Detailed Description of the Invention) and a priority characterization for the data service (column 4 lines 57-64 in Detailed Description of the Invention).

For claim 43, wherein the data flow characteristics of the data service include a bandwidth characterization for the data service (see column 14 lines 42-48 in Detailed Description of the Invention) and a priority characterization for the data service (column 4 lines 57-64 in Detailed Description of the Invention).

It would have been obvious to one of ordinary skill in the art at the time of invention was made to method as taught by Menditto et al. in the communication network of Kametani. The bandwidth and priority characterization of the data as taught by Menditto can be modified/implemented in the communication network of Kametani by enhancing the program of access gateway router. The bandwidth and priority characterization of the data information is essential for the data service network to maintain the quality of service of the link for the service provider. The motivation for implementing the same method of bandwidth and priority characterization of the data information from the access gateway router is to improve the quality of service of the link with cost effective way.

Allowable Subject Matter

14. Claim 6-7, 26-27, 32 and 29 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

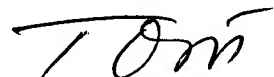
Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 2003/0214955 A1 (Kim), USP 6,167,042 (Garland et al.) and US 2004/0093424 A1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Bokhari whose telephone number is (571) 270-3115. The examiner can normally be reached on Monday through Friday from 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on (571) 272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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